

WHAT IS CLAIMED IS:

SUB A1

4. An information providing server comprising:

a storing section storing a display control file including a character string and a control character string for controlling the display;

a holding section holding an index image displaying a single picture to be display according to the display control file; and

a providing section providing an index image held by the holding section according to a request.

2. An information providing server according to claim 1, further comprising:

an index image creating section creating an index image on the basis of the display control file.

3. An information providing server according to claim 1, wherein the storing section stores a display file related to the display control file, and wherein the index image displays contents of the display control file and the display file.

4. A mediation server providing a client with a file held an information providing server, comprising:

an index image creating section creating an index image corresponding to a file received from the information providing server; and

a transmitting section transmitting, to the client, the index image created by the index image creating section and link information

to be access to the information providing server.

5 5. A mediation server according to claim 4, wherein the transmitting section transmits the index image, the link information and a file received from the information providing server to the client.

10 6. A mediation server according to claim 4, further comprising:  
a searching section searching files corresponding to a request of the client respectively given from a plurality of information providing servers;

15 wherein the index image creating section respectively creates the index image corresponding to each of the files searched by the searching section.

15 SUB A27 7. A mediation server providing a client with a file held an information providing server, comprising:

20 an element information storage section collecting and storing element information of the file held by the information providing server;

a searching section extracting an element information corresponding to a request given from the client from the element information storage section;

25 an index image creating section creating an index image corresponding to element information extracted by the searching section; and

a transmitting section transmitting the index image, as a response corresponding to the request, created by the index image

creating section to the client.

8. A mediation server according to claim 7, further comprising:  
a display control file creating section creating a display  
control file including element information extracted and an index  
image created,

wherein the transmitting section transmitting a display control  
file, as the response corresponding to the request, created by the  
display control file creating section to the client.

9. A mediation server providing a client with files held by a  
plurality of information providing servers, comprising:

an element information storage section collecting and storing  
element information of the files held by each of the information  
providing servers;

an index image creating section creating and holding an index  
image corresponding to element information of each of the files  
collected;

a searching section extracting, from the index image creating  
section, an index image corresponding to a request given from the  
client; and

a transmitting section transmitting the index image extracted by  
the searching section as a response to the request to the client.

10. A mediation server according to claim 9, wherein the  
searching section extracts, from the element information storage  
section, element information corresponding to the request given from  
the client,

the mediation server further comprises a display control file creating section creating a display control file including element information extracted and an index image corresponding to the element information, and

5 the transmitting section transmits to the client the display control file, as a response to the request, created by the display control file creating section.

11. A reference terminal for referring to a file, the file is held an information providing server and including a display control file and a display file related to the display control file, comprising:

15 an index image creating section creating an index image for displaying each of contents of the said display control file and said display file received from the information providing server by a single picture; and

a display section displaying contents of the file received from the information providing server together with the index image.

20 12. A reference terminal according to claim 11, wherein the index image creating section, when a plurality of files are received, respectively creates an index image corresponding to each of the files received, and

25 the display section sequentially displays the plurality of index images created.

13. A reference terminal according to claim 11, wherein the index image creating section, when a plurality of files are received,

respectively creates an index image corresponding to each of the files received, and

the display section displays the plurality of index images in arrangement on the same screen.

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14. A reference terminal according to claim 11, wherein the index image creating section, when a plurality of files are received, respectively creates the index images corresponding to each of the files received in accordance with a predetermined priority, and

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the display control section sequentially displays the plurality of created index images in the sequence of being created by the index image creating section.

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15. An information providing method in which an information providing server provides another server or a client with a display control file including a display character string and a control character string for controlling a display, comprising steps of:

creating an index image displaying contents displayed by the display control file by a single picture; and

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transmitting an index image created together with the display control file to the another server or the client.

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16. An information providing method in which an information providing server provides another server or a client with a display control file and a display file relate to the display control file, comprising steps of:

creating an index image displaying contents of the display control file and the display file by a single picture; and

transmitting the index image together with the display control file to the another server or the client.

5        ~~17.~~ An information providing method of a mediation server comprising steps of:

         obtaining element information of a file held an information providing servers;

         extracting element information corresponding to a request given from a client among obtained element information;

10        creating an index image corresponding to extracted element information; and

         transmitting a created index image to the client.

15        18. An information providing method of a mediation server according to claim 17, further comprising steps of:

         creating a display control file including the element information and the created index image; and

         transmitting the display control file to the client.

20        ~~19.~~ An information providing method of an mediation server, comprising steps of:

         obtaining and storing element information of files held by an information providing server;

25        creating and holding index images corresponding to each of the element information stored;

         extracting an index image corresponding to a request given from a client from the index images held; and

         transmitting the index image extracted to the reference

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terminal.

20. An information providing method of a mediation server according to claim 19, further comprising steps of:

5 extracting the element information corresponding to the extracted index image among element information stored;  
creating a display control file including an extracted element information and an extracted index image; and  
transmitting a created display control file to the client.

10 21. An information reference method of a reference terminal, comprising steps of:

receiving a file containing a display control file and a display file corresponding to the display control file from an information providing server;  
15 creating an index image displaying contents of the display control file and the display file by a single picture; and  
displaying the index image created.

20 22. An information reference method of a reference terminal according to claim 20, further comprising a step of displaying contents of the file received together with the index image.

23. A computer readable medium recorded with programs executed  
25 by a computer, wherein the programs comprises:

a program by which an information providing server creates an index image, wherein the index image displays a display control file including a display character storing and control character storing

for controlling a display by a single picture; and

a program by which the information providing server transmits to a mediation server the index image created in response to a request given from the mediation server.

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24. A computer readable medium according to claim 23, wherein the programs further comprises a program by which the information providing server transmits the display control file together with the index image to the mediation server.

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25. A computer readable medium recorded with programs executed by a computer, wherein the programs comprises:

a program by which the information server creates an index image, wherein the index image displays a display control file and a display file relating to the display control file by a single picture; and

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a program by which the information providing server transmits to a mediation server the index image created in response to a request given from the mediation server.

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26. A computer readable medium according to claim 28, wherein the programs further comprises a program by which the information providing server transmits the display control file together with the index image to the mediation server.

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27. A computer readable medium recorded with programs executed by a computer, wherein the programs comprises:

a program by which a mediation server collects element



information of file held by an information providing server;

a program by which the mediation server extracts the element information corresponding to a request given from a client among the element information collected;

5 a program by which the mediation server creates an index image corresponding to the element information extracted; and

a program by which the mediation server transmits the created index image to the client.

10 28. A computer readable medium according to claim 27, wherein the programs further comprises:

a program by which the mediation server creates a display control file including the element information extracted and the index image created; and

15 a program by which the mediation server transmits the display control file created to the reference terminal.

29. A computer readable medium recorded with programs executed by a computer, wherein the programs comprising:

20 a program by which a mediation server collects element information of files held by an information providing server;

a program by which the mediation server creates index images corresponding to each of the element information collected;

25 a program by which the mediation server extracts an index image corresponding to a request given from a client among the index images created; and

a program by which the mediation server transmits the index image extracted to the client.

30. A computer readable medium according to claim 29, wherein the programs further comprising:

5 a program by which the mediation server extracts an element information corresponding to a request given from a client among the element information collected;

a program by which the mediation server creates a display control file including the element information extracted and the index image file extracted; and

10 a program by which the mediation server transmits a created display control file to the client.

31. A computer readable medium recorded with a program executed by a computer, wherein the programs comprising:

15 a program by which the reference terminal receives from the mediation server a display control file and a display file related to the display control file;

a program by which the reference terminal creates an index image displaying contents of the display control file and the display file by a single picture; and

20 a program by which the reference terminal displays an index image created.

25 32. An information providing server, providing a client with information including image and text according to a request of the client, comprising:

a storing section storing a display control file, wherein display control file including image data relating to the information, text data relating to the information and control data for displaying

the text corresponding to the text data and the image corresponding to the image data to a screen of the client;

a holding section holding index image data corresponding to the information; and

5 a providing section providing the index image data with the client.

33. An information providing server according to claim 32, further comprising:

10 a creating section creating the index image data based on the display control file.

34. An information providing server according to claim 32, wherein the index image data includes data of a image in which a display size of a image displaying to the screen of the client as the information is reduced.

35. An information providing server according to claim 32, wherein the information is provided as a home page;

20 the index image data includes data of text and a image in which display sizes of text and a image displaying in first page of the home page is reduced.

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